OMB 0651-0031

Form PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. VT-2084CON	SERIAL NO. 09/936,675
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Barker	
Sheet Page 1 of 1	FILING DATE 3/13/02	GROUP 1745

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	REF. NO.	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	LOCATION WHE PASSAGES C APPI	E RELEVANT FIGURES R
CL		US 5721070 B1	2/24/98	Shackle		

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS	REF. NO.	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	LOCATION WHER RELEVANT PASSAGES OR FIGURES APPEA	T

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

EXAMINER INITIALS	REF. NO.	

EXAMINER Carl Clarey	DATE CONSIDERED 10-18-04

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 5

ATTORNEY DOCKET NO.	SERIAL NO.
4858-000080 USB	09/936,675
APPLICANT	
Jeremy Barker	
FILING DATE	GROUP
3/13/2002	1745

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	CL	3,736,184	5/29/73	Dey et al.		
2.		4,009,092	2/22/77	Taylor		
3.		4,049,891	9/20/77	Hong et al		
4.		4,098,687	7/4/78	Yang		
5.		4,166,159	8/28/79	Pober		
6.		4,194,062	3/18/80	Carides et al.		
7.		4,322,485	3/30/82	Harrison et al.		
8.		4,394,280	7/19/83	von Alpen et al.		
9.		4,464,447	8/7/84	Lazzari et al.		
10.		4,465,744	8/14/84	Susman et al.		
11.		4,477,541	10/16/84	Fraioli		
12.		4,512,905	4/23/85	Clearfield et al.		
13.		4,668,595	5/26/87	Yoshino et al.		
14.		4,707,422	11/17/87	de Neufville et al.		
15.		4,792,504	12/20/88	Schwab et al.		
16.		4,828,834	5/9/89	Nagaura et al.		
17.		4,830,939	5/16/89	Lee et al.		
18.		4,935,317	6/19/90	Fauteux et al.		
19.		4,985,317	1/15/91	Adachi et al.		
20.		4,990,413	2/5/91	Lee et al.		
21.	↓	5,037,712	8/6/91	Shackle et al.		

Examiner: Carol Chaney Date Considered: 10/

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)	ATTORNEY DOCKET NO.	SERIAL NO.
PATENT AND TRADEMARK OFFICE **INFORMATION DISCLOSURE CITATION** (Use several sheets if necessary)	4858-000080 USB	09/936,676
	APPLICANT	
	Jeremy Barker	
Sheet 2 of 5	FILING DATE	GROUP
	3/13/2002	1745

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
22.	CL	5,130,211	7/14/92	Wilkinson et al.		
23.		5,232,794	8/3/93	Krumpelt et al.		
24.		5,262,253	11/16/93	Golovin		
25.		5,300,373	4/5/94	Shackle		
26.		5,336,572	8/9/94	Koksbang		
27.		5,399,447	3/21/95	Chaloner-Gill et al.		
28.		5,411,820	5/2/95	Chaloner-Gill		
29.		5,418,090	5/23/95	Koksbang et al.		
30.		5,418,091	5/23/95	Gozdz et al.		
31.		5,425,932	6/20/95	Tarascon		
32.		5,435,054	7/25/95	Tonder et al.		
33.		5,456,000	10/10/95	Gozdz et al.		
34.		5,460,904	10/24/95	Gozdz et al.		
35.		5,463,179	10/31/95	Chaloner-Gill et al.		
36.		5,482,795	1/9/96	Chaloner-Gill		
37.		5,514,490	5/7/96	Chen et al.		
38.		5,540,741	7/30/96	Gozdz et al.		
39.		5,580,430	12/3/96	Balagopal et al.		
40.		5,643,695	7/1/97	Barker et al.		
41.	✓	5,674,645	10/7/97	Amatucci et al.		

Examiner: Carol Chaney Date Considered: 10-18-04

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Sheet 3 of 5

ATTORNEY DOCKET NO.	SERIAL NO.
4858-000080 USB	09/936,676
APPLICANT	
Jeremy Barker	
FILING DATE	GROUP
3/13/2002	1745

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
42.	CL	5,702,995	12/30/97	Fu	—	
43.		5,910,382	6/8/99	Goodenough et al.	—	
44.		6,004,697	12/21/99	Thackeray et al.	—	
45.		6,153,333	11/28/00	Barker	—	

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	Translation No
1.	CL	EP 1 049 182	11/2/00	Europe	—	X	
2.		EP 1 093 172	4/18/01	Europe	—	X	
3.		EP 0 680 106	11/2/95	Europe	—	X	
4.		WO 00/01024	1/6/00	WIPO	—		
5.		WO 98/12761	3/26/98	WIPO	—		
6.		WO 99/30378	6/17/99	WIPO	—		
7.		WO 00/57505	9/28/00	WIPO	—		
8.		JP 61-263069	11/21/86	Japan	—	Abstract	
9.		JP 6-251764	9/9/94	Japan	—	Abstract	

Examiner: [signature] Date Considered: 10-18-04

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Sheet 4 of 5

ATTORNEY DOCKET NO.	SERIAL NO.
4858-000080 USB	09/930,673
APPLICANT	
Jeremy Barker	
FILING DATE	GROUP
3/13/2002	1745

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.	CL	A. B. Bykov et al., Superionic Conductors Li3M2(PO4)3 (M=Fe, Sc, Cr): Synthesis, Structure and Electrophysical Properties, Solid State Ionics 38 (1990) 31-52.
2.		Rangan et al., New Titanium-Vanadium Phosphates of Nasicon and Langbeinite Structures, and Differences between the Two Structures Toward Deintercalation of Alkali Metal, Journal of Solid State Chemistry 109, 116-121 (1994).
3.		Kirkby et al, Crystal Structure of Potassium Aluminum Fluoride Phosphate, KAlFPO4, Department of Chemistry, University of Toronto, Toronto, Ontario, Canada, M5S 1A1.
4.		J. Arlt et al., Na5AlF2(PO4)2: Darstellung, Kristallstruktur und Ionenleitfahigkeit, Z. anorg. allg. Chem. 547 (1987) 179-187.
5.		P G Nagornyi et al., Preparation and Structure of the New Flouride Phosphate Na5CrF2(PO4)2, Russian Journal of Inorganic Chemistry 35 (4) 1990.
6.		Loiseau et al., NH4FePO4F: Structural Study and Magnetic Properties, Journal of Solid State Chemistry III, 390-396 (1994).
7.		LeMeins et al., Phase Transitions in the Na3M2(PO4)2F3 Family (M=Al3+, V3+, Cr3+, Fe3+, Ga3+): Synthesis, Thermal, Structural, and Magnetic Studies, Journal of Solid State Chemistry 148, 260-277 (1999).
8.		Yakubovich et al., Inorganic Compounds: The Mixed Anionic Framework in the Structure of Na2{MnF[PO4]}, Acta Cryst. (1997) C53, 395-397.
9.		Moss et al., On the X-ray Identification of Amblygonite and Montebrasite, Mineralogical Magazine, September 1969, vol. 37, No. 287.
10.		LeMeins et al., Ionic Conductivity of Crystalline and Amorphous Na3Al2(PO4)2F3, Solid State Ionics III (1998) 67-75.
11.		M. Dutreilh et al., Synthesis and Crystal Structure of a New Lithium Nickel Fluorophosphate Li2 [NiF(PO4)] With an Ordered Mixed Anionic Framework, Journal of Solid State Chemistry 142, 1-5 (1999).
12.		Manthiram et al., Lithium Insertion Into Fe2(SO4)3 Frameworks, Journal of Power Sources, 26 (1989) 403-408.
13.	V	Amblygonite Mineral Data; http://webmineral.com/data/Amblygonite.shtml.

Examiner: [signature] Date Considered: 10-18-04

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Sheet 5 of 5

ATTORNEY DOCKET NO.	SERIAL NO.
4858-000080 USB	09/936,675
APPLICANT	
Jeremy Barker	
FILING DATE	GROUP
3/13/2002	1745

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
14.	CL	Lacroixite Mineral Data, http://webmineral.com/data/Lacroixite.shtml
15.		Montebrasite Mineral Data, http://webmineral.com/data/Montebrasite.shtml
16.		Tavorite Mineral Data, http://webmineral.com/data/Tavorite.shtml
17.		A. Nadiri et al., Lithium Intercalation in Lithium Titanium Phosphate, C. R. Acad. Sci., Ser. 2 (1987), 304 (9), 415-18 (Abstract Provided).
18.		Genkina et al., Phase Formation and Crystallochemistry of Iron Phosphates Formed Under Hydrothermal Conditions, Izv. Akad. Nauk SSSR, Neorg. Mater. (1988), 24 (7), 1158-62 (Abstract Only).
19.		Genkina et al., Crystal Structure of Synthetic Tavorite (LiFe[PO4] (OH,F)), Kristallografiya (1984), 29 (1), 50-5 (Abstract Only).
20.		International Search Report, PCT/US01/08132
21.		Mt. Averbuch-Pouchot et al., "Topics in Phosphate Chemistry", World Scientific 1996.
22.		J. Gopalakrishnan et al., V2(PO4)3: A Novel NASICON-Type Vanadium Phosphate Synthesized by Oxidative Deintercalation of Sodium from Na3V2(PO4)3, Chem. Mater., Vol. 4, No. 4, 1992, p. 745-747.
23.	✓	International Search Report, PCT/US00/04401 (attached to WO 00/57505)

Examiner: [signature] Date Considered: 10-18-04

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

531 Rec'd PCT 14 SEP 2001

09/936675

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Sheet 1 of 3

ATTORNEY DOCKET NO.	SERIAL NO.
4858-000080USB	
APPLICANT	
Barker	
FILING DATE	GROUP

U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.	CL	6,153,333	11/28/2000	Barker		
2.		5,674,645	10/07/1997	Amatucci et al.		
3.		5,514,490	05/07/1996	Chen et al.		
4.		4,985,317	01/15/1991	Adachi et al.		
5.		4,512,905	04/23/1985	Clearfield et al.		
6.		4.049,891	09/20/1977	Hong et al.		
7.		4,009,092	02/22/1977	Taylor		
8.		3,736,184	05/29/1973	Dey et al.		

FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.	CL	EP 0 680 106 A1	11/02/1995	EPO		Yes	
2.	CL	JP 61-263069	11/21/1986	JP		Abstract	
3.	C	WO 98 12761 A	03/26/1998	US		Yes	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Ref. Desig.	Examiner's Initials	
1.	CL	International Search Report for PCT/US97/15544; EPO - 01/13/1998
2.		Delmas et al., "The Nasicon-type...Materials"; SSI (1988) 28-30 (419-423)
3.		Hagenmuller et al., "Intercalation in 3-D...Features"; Mat. Res. Soc. Proc., SSI, (1991) 323-34

Examiner: [signature] Date Considered: 10-16-04

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449) **PATENT AND TRADEMARK OFFICE** **INFORMATION DISCLOSURE CITATION** (Use several sheets if necessary) Sheet 2 of 3	ATTORNEY DOCKET NO.	SERIAL NO. 09/936675
	4858-000080US B	
	APPLICANT	
	Barker	
	FILING DATE	GROUP

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
4.	CL	Chem. Abstrs. Svs., (1997); XP 2048304
5.		Padhi et al., "Lithium Intercalation into Nasicon-type...and $Li_2FeTi(PO_4)_3$" 37th Power Sources Conference; Cherry Hill, New Jersey; Conference Date: June 17-20, 1996, published Oct. 15, 1996
6.		J. Gopalakrishnan and K. Kasthuri Rangan, "$V_2(PO_4)_3$: A Novel NASICON-Type Vanadium Phosphate Synthesized by Oxidative Deintercalcalation of Sodium from $Na_3V_2(PO_4)_3$," Chemistry of Materials, Vol. 4, No., 4, 745-747, July/August 1992
7.		K. Kasthuri Rangan and J. Gopalakrishnan, "New Titanium-Vanadium Phosphates of Nasicon and Langbeinite Structures, and Differences Between the Two Structures Toward Deintercalation of Alkali Metal," Journal of Solid State Chemistry, 109, 116-121, 1994
8.		Delmas et al., "The Chemical Short Circuit Method...", Mat. Res. Bull., Vol 23, pp. 65-72 (month not available), 1988
9.		Ivanov-Schitz et al., "Electrical...electrodes"; SSI (Oct 96) 91 (93-99)
10.		Cretin et al., "Study...Sensors", JR. EP. Ceramic Soc., (1995) (Vol. 15, No. 11) (1149-56)
11.		Chem. Abstrs. Svs., (1995) XP 2048305
12.		Patents Abstracts of Japan (1994) Vol. 18, No. 64 (Abstr. for JP 06251764)
13.		Okada et al., "$Fe_2(SO_4)_3$ as a Cathode Material for Rechargeable Lithium Batteries", status as publication to be verified; cited by Examiner in SN 08/717,979
14.		Adachi et al., "Lithium Ion Conductive Solid Electrolyte", Chemical Abstracts 112 129692 (1981)
15.		Delmas et al., "A Nasicon-Type Phase as Intercalation Electrode: Sodium Titanium Phosphate ($NaTi_2(PO_4)_3$", Mater. Res. Bull. (1987)
16.		Nanjundaswamy et al., "Synthesis, Redox Potential Evaluation and Electrochemical Characteristics of NASICON-Related-3D Framework Compounds", SSI 92 (1996)
17.		K. Kubo et al., "Synthesis and Electrochemical Properties for $LiNiO_2$ Substituted by Other Elements", Journal of Power Sources 68 (1997), pp. 553-557

Examiner: [signature] Date Considered: 10-18-04

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) Sheet 3 of 3	ATTORNEY DOCKET NO.	SERIAL NO 09/936675
	4858-000080USB	
	APPLICANT	
	Barker	
	FILING DATE	GROUP

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
18.	CC	"Topics in Phosphate Chemistry", M-T Averbuch-Pouchot, A. Durif, World Scientific Publishing Co., Ptc. Ltd.
19.		Padhi et al., "Phosopho-Olivines as Positive-Electrode Materials for Rechargeable Lithium Batteries", J. Electrochem. Soc., Vol. 144, No. 4, April 1997, pp. 1188-1194
20.		Search Report for PCT/US00/04401; US - July 31, 2000

Examiner: [signature] Date Considered: 10-16-04

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.